

15 March 2001

FACT SHEET

FINAL AMENDMENTS AND PARALLEL PROPOSAL TO EPA'S AIR TOXICS STANDARD FOR FERROALLOYS PRODUCTION: FERROMANGANESE AND SILICOMANGANESE

TODAY'S ACTION

- ! The Environmental Protection Agency (EPA) is issuing a direct final rule to amend its rule reducing emissions of air toxics from ferromanganese and silicomanganese production. Ferromanganese and silicomanganese are consumed primarily in iron and steel making where they are used to produce steel and cast iron products with enhanced or special properties. EPA promulgated its initial rule for this industry in May 1999.
- ! EPA is taking this action in response to certain issues raised in a July 1999 petition from Eramet Marietta, the only industrial source affected by the rule. After giving it careful review, EPA accepts the petition, agrees with some of the issues raised, and is moving forward to amend the final rule.
- ! In addition to the direct final rule, EPA is issuing a parallel proposal for this action. For direct final rules, EPA must withdraw the rule if any adverse comments are received from the public. Anticipating the possibility of that event, EPA is also issuing a proposed rule that would make the amendments to the final rule. This parallel action will ensure that, if adverse comments are received on the direct final rule, EPA will be able to move as quickly as possible to address any new issues that may be raised.
- ! Through this action, EPA is also extending the compliance date for the rule from May 21, 2001, to November 21, 2001.
- ! The amended rule will ease one of the emission limits that EPA now believes to be overly stringent. It will also add new emission limits to accommodate the production of different alloys in each of the two open submerged furnaces.
- ! Other components of the promulgated rule, including the emission limit for semi-closed furnaces, manganese oxygen refining processes, crushing and screening operations, remain unchanged. There are also no changes to the opacity limit, fugitive dust control plan, maintenance and operating requirements, or monitoring, recordkeeping and reporting requirements.

- ! EPA expects the costs and economic impacts to be minimal. The only costs associated with the standards are those required to perform compliance assurance activities such as performance testing, monitoring, reporting, and recordkeeping.
- ! EPA does not expect the price of ferromanganese and ferromanganese for consumers to change as a result of this rule.

BACKGROUND

- ! The Clean Air Act requires EPA to regulate emissions of 188 listed toxic air pollutants. For major sources (those with the potential to emit 10 tons annually or more of a listed pollutant or 25 tons or more of a combination of pollutants), the law requires EPA to develop standards that will require the application of stringent air pollution controls.
- ! EPA has identified the production of ferromanganese and silicomanganese as a major source of air toxics.
- ! In May 1999, EPA issued its final rule reducing emissions of air toxics from these industries. In the 1999 rule, the Agency established alloy specific emission limits for particulate matter (PM) from the two existing open submerged arc furnaces when producing ferromanganese or silicomanganese.
- ! In July 1999, following EPA's promulgation of the final rule, Eramet Marietta (formerly Elkem Metals), the only industrial source subject to the rule, filed a petition for reconsideration. In the petition, Eramet argued that in the 1999 rule EPA relied on information that was not available to the public during the public comment period. In addition, the petitioner objected to certain specific changes made between proposal and promulgation that resulted in emission limitations that are more stringent than those proposed and which were not based on any comments in the public record.
- ! In response, EPA carefully considered and analyzed information provided by the petitioner and determined that some of the arguments presented warranted changes to the rule.

FOR FURTHER INFORMATION

- ! Interested parties can download the rule from EPA's web site on the Internet under recent actions at the following address: (<http://www.epa.gov/ttn/oarpg>). For further information about the proposal, contact Mr. Conrad Chin of EPA's Office of Air Quality Planning and Standards at (919) 541-1512.

! EPA's Office of Air and Radiation's homepage on the Internet contains a wide range of information on the air toxics program, as well as many other air pollution programs and issues. The Office of Air and Radiation's home page address is: (<http://www.epa.gov/oar/>).

**ADDENDUM TO FACT SHEET FOR FINAL AIR TOXICS RULE FOR
FERROMANGANESE AND SILICOMANGANESE PRODUCTION**

DETAILED DESCRIPTION OF THE AMENDED DIRECT FINAL RULE

Emission standards

The affected units include two open electric arc furnaces (EAFs), a semi-closed EAF, a manganese oxygen refining (MOR) vessel, and raw material crushing and screening operations. The following table summarizes the particulate matter emission standards, by process.

New or reconstructed or existing source	Affected source	Applicable particulate matter emission standards
New or reconstructed	Submerged arc furnace (primary and tapping)	1. 0.23 kg/hr/MW (0.51 lb/hr/MW), or 2. 35 mg/dscm (0.015 gr/dscf)
Existing	Open submerged arc furnace (primary and tapping)	1. 16.3 kg/hr (35.9 lb/hr) when producing silicomanganese at a furnace power input greater than 25 MW 2. 12.3 kg/hr (27.2 lb/hr) when producing silicomanganese at a furnace power input of 25 MW or less 3. 9.8 kg/hr (21.7 lb/hr) when producing ferromanganese at a furnace power input of 22 MW or less 4. 13.5 kg/hr (29.8 lb/hr) when producing ferromanganese at a furnace power input greater than 22 MW
Existing	Semi-sealed submerged arc furnace (primary, tapping, and vent stacks)	11.2 kg/hr (24.7 lb/hr) when producing ferromanganese
New, reconstructed, or existing	MOR process	69 mg/dscm (0.03 gr/dscf)
New or reconstructed	Individual equipment associated with the crushing and screening operation	50 mg/dscm (0.022 gr/dscf)

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Opacity standards

The rule would establish a 20 percent opacity limit on the two shop buildings which each houses one of the open design EAF. The building that houses the semi-closed EAF would have an opacity limit that may exceed 20 percent once for not more one distinct six-minute period in any 60-minute period, but should not exceed 60 percent opacity, as a distinct six-minute period at any time. Blowing taps, poling and oxygen lancing of the tap hole, burndowns associated with electrode measurements and maintenance activities associated with submerged arc furnaces and casting operations are exempt from the opacity standards.

Fugitive Dust Emissions

For fugitive emissions from material handling and ore storage, roadways and plant areas, techniques such as sweeping to remove materials, and dust suppression methods such as regular wetting with water can greatly reduce emissions. Enclosing these operations in buildings or installing capture hoods with particulate matter control devices at transfer points are very effective techniques. The rule requires each facility to develop a fugitive dust control plan that specifies which techniques will be used to effectively suppress dust emissions.

Inspection and Monitoring Requirements

Each capture and control system would be required to be inspected once per month. For each control device covered by this rule, the owner or operator would be required to prepare and operate according to a written control device operating procedures manual. The performance of baghouses would be assured by regular opacity or visible emission observations as specified in the rule. The performance of venturi scrubbers would be assured by monitoring pressure drop.